

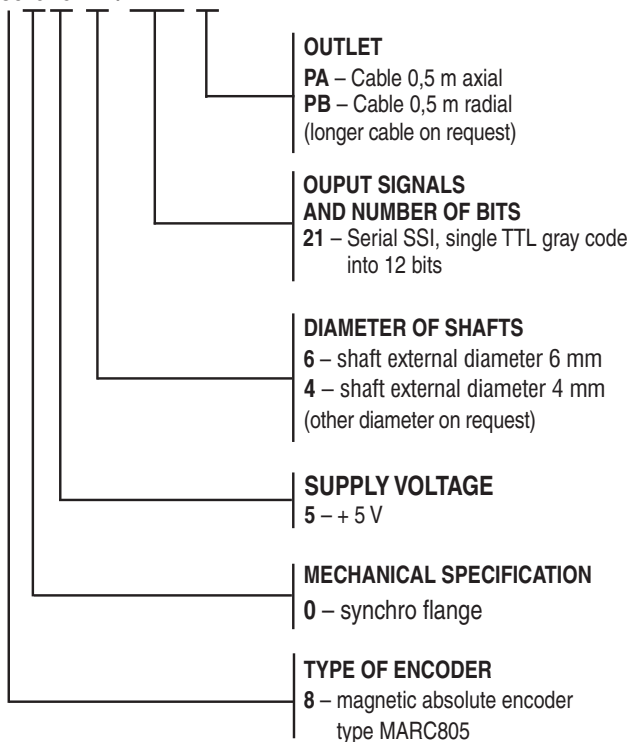
# Magnetic absolute encoders MARC805

**MARC805** – synchro flange, external diameter of the shaft 6 mm

The magnetic single turn absolute rotary encoders type MARC805 working on magnetic Hall Effect principle. The encoder converts rotary motion to electrical signals. Electrical signals provide information of bilateral position of two mechanical parts, angle turn or rotary motion. A typical use is in conjunction with digital control system or drivers for control of the electric motors.

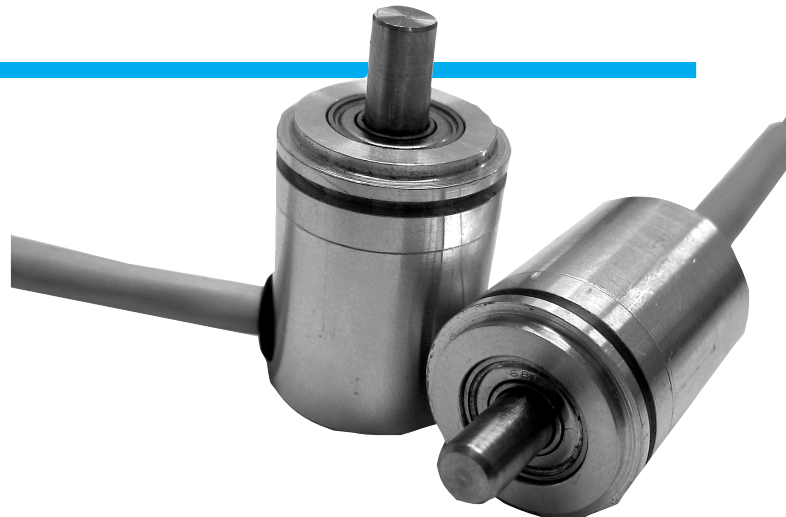
## Type identification

MARC8 0 5 - X / XXXX XX



## Technical data

ELECTRICAL DATE / TYPE	MARC805
Positions per rotation	into 12 bits (into 4096 pos.)
Supply voltage max. $U_N$ (V)	+ 5 ± 5%
Supply current max. $I_N$ (mA)	50



## Mechanical data and working conditions

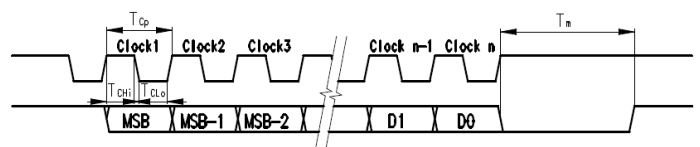
Rotational speed max.	10000 min. <sup>-1</sup>
Angular acceleration max.	40000 rad.s <sup>-2</sup>
Moment of inertia of mechanical parts max.	5g.cm <sup>2</sup> ± 10 %
Vibration according to FCČSN345791	10g <sub>n</sub> (10 to 2000 Hz)
Shock max.	50g <sub>n</sub> (100 ms)
Shaft loads MARC805	– axial max. 10 N – radial max. 20 N
Working temperature	– 25° to + 80° C
Humidity relative / absolute	max. 95 % / max. 40g.m <sup>-3</sup>
Atmosphere (without aggressive substances)	73,3 to 126,6 kPa
Type of protection	IP64
Weight MARC805	ca. 0,10 kg
Length cable max.	50 m

## Output signals MARC805

21 – Serial SSI, single TTL CLOCK/DATA signals, gray code into 12 bits (4096 pos.).

## SSI communication

Parameter	Symbol	Min	Max	Unit
Clock period	$T_{Cp}$	250	2x $T_m$	μs
Clock High	$T_{CHi}$	25	$T_m$	μs
Clock Low	$T_{CLo}$	25	$T_m$	μs
Monoflop time	$T_m$	16	20,5	μs



## Description of connection elements MARC805

Colors of connection cable	Significance MARC805
Grey	NC
Pink	NC
Blue	INC – Signal Z <sup>(1)</sup>
Violet	SSI – DATA+
Yellow	INC – Signal A <sup>(1)</sup>
White	SSI – CLOCK+
–	NC
Green	INC – Signal B <sup>(1)</sup>
Shield	Shield
Black	GND
Brown	GND
Red	V <sub>cc</sub> + 5 V

(1) Only on request

## Assembly

The encoders MARC805 are fixed into the equipment by the synchro groove. Centering of encoder is determined by mat fits diameter 19f7. The connection has to be constructed so as to avoid exceeding the maximum radial or axial shaft load permitted. It is necessary to keep alignment connection. It is recommended to use suitable homokinetic diaphragm couplings.

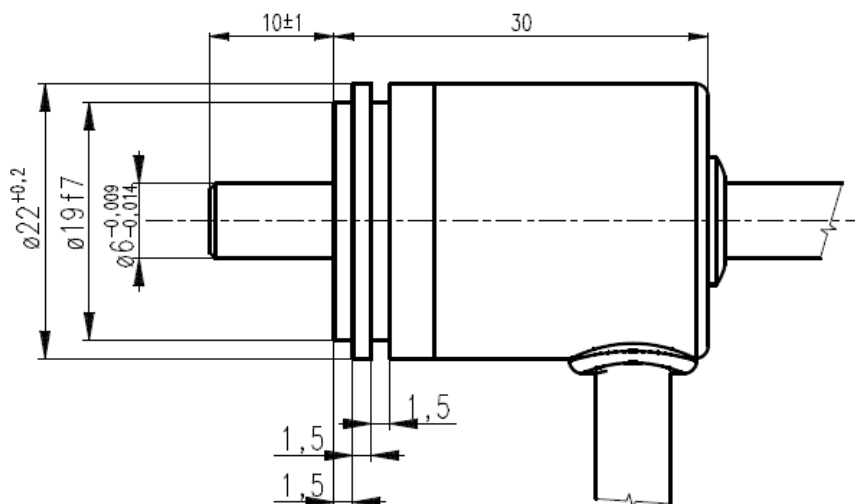
### How to order?

Please indicate encoder type, number of impulses per rotation, outlet, number of pieces, delivery term and other non-standard features. Connecting cable and homokinetic diaphragm couplings can be ordered as well [see Accessories catalogue list].

### Example

10 pcs MARC805/21PA. Delivery term – three weeks.

## Dimensioned drawing MARC805



***Preliminary data sheet!***